Program Mission

Protect, preserve, and enhance the air quality of Washington to safeguard public health and the environment and support high quality of life for current and future generations.

Environmental Threats

Air quality concerns come in three forms: public health, environment, and quality of life.

Air pollution causes lung disease and worsens existing respiratory and cardiopulmonary disease. Hundreds of studies have found that short and long term exposures to air pollution increase respiratory symptoms, emergency room visits, hospitalizations and medication use; decrease lung function; cause absences from school and work; and restrict activity for some people.

Air pollution increases chronic respiratory illness; increases the overall death rate; increases the likelihood of contracting cancer; and decreases lung function in children, pre-disposing them to chronic, obstructive pulmonary disease as adults. Air pollution also affects the environment and quality of life in other ways, including; damage to soils, water, crops, vegetation, manmade materials, property, animals, and wildlife; impaired visibility; climate and weather; and transportation hazards. When air pollution creates noxious odors or irritating fumes, it can harm the economic value of homes and other types of real estate, as well as personal comfort and well being.

Since the Washington State Legislature expanded statewide air quality efforts in 1991, overall air quality in Washington has greatly improved. Washington citizens save more than \$2 billion per year in health costs and through economic benefits related to cleaner air. But even with current efforts, 1,400 people die each year from exposure to fine particle pollution in Washington, according to the Natural Resources Defense Council. Fourteen areas of Washington have been designated as violating national ambient, health based air quality standards for six chemicals

known as "criteria" pollutants. More than 3 million people live within these areas. Additionally, special monitoring studies show the potential for violations in several new areas, such as Colville and parts of the Columbia plateau. Although air quality has improved significantly in the state's major urban areas and most are currently meeting healthy air standards; most areas still remain close to violating one or more federal air quality standards.

In addition to the six criteria pollutants, hundreds of other chemicals, known as toxic or hazardous air pollutants, enter the atmosphere from a wide variety of sources. These chemicals are not subject to national ambient, health-based standards. Because of limited air quality and health risk data for Washington State, the level of public health and environmental damage caused by toxic air pollutants is more uncertain than health risks associated with the criteria pollutants.

Authorizing Laws

- Chapter 70.94 RCW, Clean Air Act
- Chapter 70.120 RCW, Motor Vehicle Emission Control

Constituents/Interested Parties

- Motorists, transportation agencies, and motor vehicle related businesses
- Industry
- Wood stove and fireplace users, manufacturers, and related businesses such as dealers
- Agriculture
- Citizens

Major Activities

The Air Quality Program recently completed a strategic planning effort that established six air quality goals, as described below.

Prevent Violations of Air Quality Standards

Washington faces continuing growth that threatens to overwhelm the agency's current strategies to maintain air quality standards. Because of a limited monitoring network, we are unable to determine the quality of air in some areas of the state. The agency's goal is to reduce ambient air pollutant concentrations to levels that provide less than a 1 percent chance of triggering violations of health based National Ambient Air Quality Standards (NAAQS) by 2010. Major milestones in achieving this goal include:

- Achieve redesignation of all remaining nonattainment areas (areas that violate federal standards) by June 2003.
- In 2002, complete a statewide assessment and prioritization of areas for their likelihood of violating standards.
- By June 2003, develop a Nonattainment Early Warning System (NEWS) a method for assessing county-by-county likelihood of violating federal health based air quality standards.
- Design and implement strategies to address fine particle problems in Colville, Walla Walla, and Wallula.

Reduce Motor Vehicle Emissions

More people, more growth, and more sprawl mean more traffic and more pollution from motor vehicles. Without significant emission reductions in addition to those being provided by existing programs, the agency cannot reasonably assure future attainment of federal air quality standards, avoid the imposition of multi-million dollar control costs to businesses and citizens, nor prevent more harmful health effects on citizens from increased air pollution. The agency's goal is to reduce emissions from mobile sources by 35 percent by 2010. Major milestones in achieving this goal include:

- Award new Emission Check contract by August 2001.
- Implement improvements to the Emission Check Program by July 2002.
- Partner with other state and local air quality agencies and the private sector to promote diesel retrofitting of public and private fleets, and the use of lower volatility gasoline and

- ultra low sulfur diesel fuel in the Pacific Northwest.
- In cooperation with the Governor's Office, promote the purchase of hybrid and other low emission vehicles through state purchasing decisions and contracts.

Improve Visibility

Visibility is reduced even when air pollution is well below levels allowed by the federal health based standards. Clear views within our national parks and wilderness areas, as well as views from outside these areas, are important to our economy and our quality of life. To enhance and preserve this cherished natural resource, we need to develop and implement strategies that will significantly reduce visibility-impairing emissions. The agency's goal is to develop and implement control strategies to reduce human caused visibility-impairing emissions by 25 percent by 2010 and by 50 percent by 2020. Major milestones in achieving this goal include:

- Develop and begin testing methods for identifying sources and their contributions to visibility impairment by July 2002.
- Track trends in visibility-impairing pollutants using data from monitoring sites with more than three years of data.
- Provide staffing and funding to support multiagency consensus processes for a visibility strategy in the Columbia River Gorge National Scenic Area.

Reduce Risk from Toxic Air Pollutants

Although the federal government is beginning to address many toxic air pollutants, it may or may not address those toxics most significant in Washington State in a timeframe that provides satisfactory protection for Washington citizens. The agency's goal is to reduce emissions of priority toxic air pollutants by 50 percent by 2010, and significantly reduce potential risk to the public of cancer and other serious health effects caused by airborne toxics. Major milestones in achieving this goal include:

Develop a toxic ranking method to identify the dozen or so priority chemicals with the highest potential health risk for citizens of Washington State by the end of 2001.

Because many of these chemicals are also on

- the Persistent, Bioaccumulative Toxins (PBT) list this ranking method will assist other agency efforts with ongoing PBT initiatives.
- Determine sources of priority toxics by July 2002.
- Determine strategies to reduce emissions of priority toxics by 2002.

Improve Public Understanding of the Risks and Costs of Air Pollution

Citizens, regulators, and elected officials need to be well informed about the effects of air pollution and pollution reduction strategies in order to take appropriate action to minimize those effects. The agency's goal is to provide easily accessible and understandable information about the risks and costs of air pollution and air pollution reduction strategies to citizens and elected officials. Major milestones in achieving this goal include:

- Complete an analysis of a statewide public survey on air quality issues by the end of 2001.
- Design and begin implementing a community based marketing and outreach strategy by June 2002.

Reduce Smoke and Dust in Eastern Washington

Nagging regional smoke and dust pollution plagues many areas in Central and Eastern Washington. Source specific air pollution problems often are not resolved quickly and efficiently. Efforts at preventing problems are frequently hit-or-miss. The agency's goal is to achieve air quality levels in Eastern and Central Washington by 2010 that experts agree are sufficient to protect human health. Major milestones in achieving this goal include:

- Implement a Web-enabled agricultural burning permit by spring 2002.
- Complete audits of local burning permit programs by spring 2002.
- Establish a land clearing burning permit program by September 2002.
- Reduce emissions from cereal grain stubble burning by 40 percent by the end of the biennium, using a 1998 baseline.

Major Issues

Growth Threatens Air Quality Gains

Air pollution levels in Washington are within 1 percent of violating federal standards for smog (ozone), 3 percent for carbon monoxide, and 7 percent for fine particles. Population growth, more cars, and economic expansion will continue to push emissions of air pollutants higher. It will take vigilance and the combined efforts of citizens, business, and government to sustain our air quality gains.

Visibility and Regional Haze

Citizens complain when their views of Mt.
Rainier, the Olympics, or the Columbia Gorge are obstructed by air pollution. Regional haze and visibility degradation also affects tourism, restrain economic growth, and diminishes the quality of life for Washington residents. Federal law requires the state to eliminate human caused visibility impairment in our national parks and wilderness areas by 2064. Businesses, governments, and citizens who have already controlled emissions to protect public health may have to further reduce emissions if they are found to contribute to the degradation of scenic views.

Redesignation of the Wallula Fine Particulate Matter Nonattainment Area

The designation "nonattainment" is used to identify areas that do not meet federal health standards for ambient air quality. The Clean Air Act then requires a state to develop and implement a plan to clean up the air. Wallula presents unique challenges for the agency, because the area is sparsely populated, and the main cause of pollution is considered to be windblown dust. Businesses and elected officials in the Wallula area are concerned that expensive and unnecessary controls may be imposed that will have little or no effect on solving the air quality problem.

Toxic Air Pollutants

Air quality regulators have traditionally split air pollutants into two categories: criteria pollutants (six compounds for which federal ambient standards have been set) and toxic pollutants.

Hundreds of toxic chemicals (totaling millions of pounds) are released into the air each year in Washington. No ambient standards and few emission limits have been established for these chemicals. We have limited understanding of the sources and quantity of emissions, ambient concentrations, and potential effects on human health and the environment of toxics in Washington's air.

To develop a rational strategy for addressing these pollutants, the agency is now working on a comprehensive evaluation of what is known about air toxics in Washington. We are researching strategies that can be combined with pollution prevention efforts and other voluntary and cost-effective toxic reduction efforts. These strategies will complement EPA's efforts to reduce toxics from some of the large existing sources currently operating in Washington.

Outdoor Burning

Burning of unwanted trash and natural debris is a frequent occurrence in many areas of Washington. Our clean air law governs where and what burning is allowable. The regulations implementing the law call for changes in burning programs and prohibitions. This trend for tighter restrictions on burning produces conflict in situations where the pressure or desire to burn is strong. In fact, the pressure to burn is increasing on many fronts. The demand for burning to remove agricultural and horticultural debris (straw, prunings, trunks, and stumps) fluctuates along with changes in agriculture. Intentional burning in the forests is likely to increase as a part of restoring the health of forests. Pressure to reduce burning is also increasing. People don't like to be "smoked-out," and are demanding clean air. Fire safety professionals have increasing concerns about burning and fires getting out of control. We predict that the pattern of frequent changes in burning programs will continue as state and local agencies struggle to find the balance between clean air, reasonable alternatives to burning, and necessary burning.

Motor Vehicle Emission Check Program

Emission inspections are required of all gasoline and diesel cars and trucks, five to 25 years old, in

the Seattle, Tacoma, Spokane, and Vancouver areas. Because the motor vehicle Emission Check Program affects nearly a million vehicle owners each year, the agency needs to ensure that the program meets both air quality and public service needs. This will be a major challenge as a new contractor takes over the program in 2002, resulting in upgraded inspection procedures and new inspection locations.

There is less than one year in which to make the transition to the new contractor. During this time, the current and new contractors will be competing for some of the same resources, such as staff and equipment. In addition to the transition, customer service continues to be a major issue. The Legislature did not increase the emission check fee during the 2001 session. The lack of a fee increase left potential test contractors unable to meet both air quality and customer service needs when the current contract expires in 2002. During recent contract negotiations, the agency gave priority to public health protection, which may result in less convenient service for the public.

Air Quality Problems Have Not Been Solved

The success of the agency and its business, government, and citizen partners in cleaning up Washington's air, coupled with limited media attention to air pollution issues, has created a public perception that either the problems are solved or no problems exist. The lack of public understanding about the status of and trends in air quality could slow progress toward solving Washington's remaining air quality problems and in finding the will to prevent future ones. For this reason, the Air Quality Program will be making a concerted effort over the next two years to make air quality information more readily accessible to citizens and elected officials.

Air Quality Program Budget Budget: \$29,307,644; Staffing: 116 FTEs

State	(\$)	Sources	Uses
	Amount		
General Fund - State	17,972,053	Multiple; vehicle emissions inspections fee	Ambient air monitoring, grants to local air authorities, new source permits, modeling and meteorology, emission inventory, vehicle emission testing.
Federal			
General Fund - Federal	8,187,086	Federal grants	State and local air authority grants for ambient air monitoring, emission inventory, modeling, meteorology, and other air quality activities. Includes special project grants.
Dedicated Funds			
Air Operating	1,818,208	Permit fees collected for	Issuing permits to major air pollution sources, small
Permit		air contaminant sources	business technical assistance.
Air Pollution Control	907,101	Air registration fees; burning permit fees	Registration program, agricultural burning permitting, burning alternatives research.
Woodstove	333,196	Fees on the retail sale of	Enforcement and education on proper woodstove use,
Education &		woodstoves and	grants to local air authorities.
Enforcement		fireplaces	
Environmental	76,000	Tacoma Public Utilities	Review, proposal, and final documents associated with
Excellence			the Environmental Excellence project.
Grass Seed Burning	14,000	Fees on open burning of	Research on alternatives to grass seed burning.
Research		grasses grown for seed	

Air Quality Dollars by Fund Source

Air Quality Dollars by Activity

